

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004035**Date Inspected:** 04-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China**CWI Name:** Wu Ming Kai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:****Tower Shop Bay 3 Deck Repairs**

This Quality Assurance (QA) inspector arrived at ZPMC in Shanghai China for random observation of Orthotropic Bridge Girders (OBG) and Self Anchored Suspension (SAS) Bridge. This QA inspector observed ZPMC in the heavy duty tower shop bay 3 performing repair welding operation for deck panel DP562-001 and spoke with ZPMC CWI Sun Wei who informed the QA inspector that they were not documenting the repair welding parameters as instructed by his supervisors. Mr. Sun Wei was informed that documentation of all welding is outlined within the special provisions and ZPMC's WQCP. The special provisions section 8.3.01 states as follows; "Inspection and approval of all joint preparations, assembly practices, joint fit-ups, welding techniques, and the performance of each welder, welding operator, and tack welder shall be documented by the QC Inspector on a daily basis for each day that welding is performed. For each inspection, the QC Inspector shall confirm and document compliance with the requirements of the AWS code criteria and the requirements of these special provisions on all weld joints before welding, during welding, and after the completion of each weld." A TL-015 will be generated for this issue. Noted in this bay also was that during initial observations there was thirteen (13 ea) deck panels inside the shop. ZPMC had six (6) Deck Panels in process for repairs that included the welding and grinding of located areas outlined by the 3 party initial inspections performed previously. The deck panels in process are DP568-001, DP572-001, DP557-001, DP563-001, DP552-001 and DP562-001. ZPMC spent the remainder of the shift performing work on these panels. Certified Welding Inspector for ZPMC Sun Wei was present on a periodic basis at this location for the monitoring of the deck repairs and inspection. Also noted in bay 3 to monitor deck panel repairs were ABF personnel Kevin Chen, Wang Zhong Yuan and Ding Bao Hua.

**Base Metal Repair Bay 4**

During this QA inspector random observations it was noted in bay 4 on side plate SP398-001 welds 008/009 on

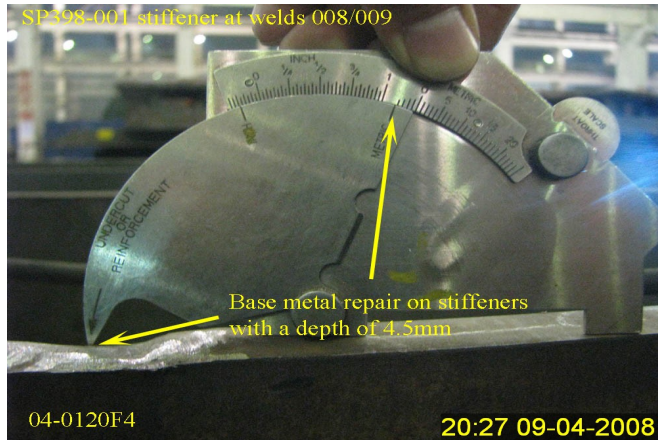
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## WELDING INSPECTION REPORT

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the top of the side plate (edge) ZPMC had ground this area which took the depth to 4 – 4.5mm below the horizontal plane of the base material. This QA inspector spoke with ZPMC CWI Wu Ming Kai in regards to submitting a CWR request due to base metal repairs needing engineer's approval. Mr. Kai stated that he would inform his supervisors of this location. See digital photos below.



### Summary of Conversations:

As stated above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco , 1-381-694-2685, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Riley,Ken	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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